

# Si Photodiode

# KPD1801H

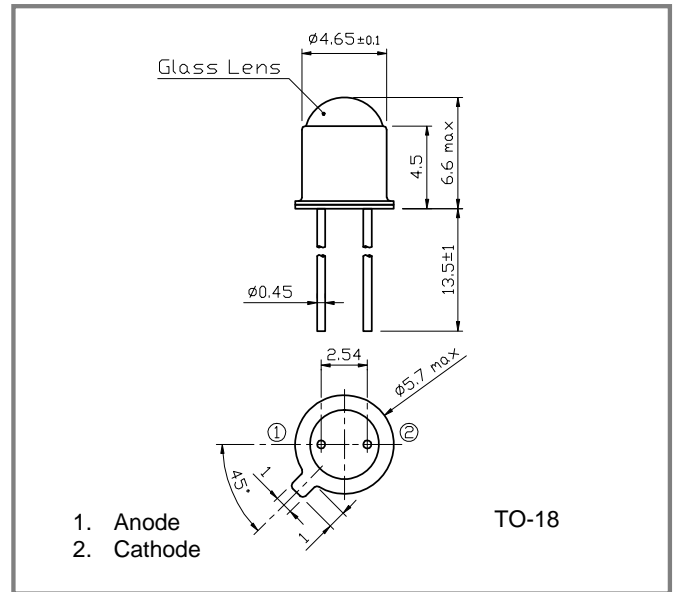
### Features

- High sensitivity provided by glass lens
- Sharp directivity
- Hermetic seal type for high reliability uses

### Applications

- Optical switches
- Optical encoders
- Remote controls
- Sensors and industrial controls

### Dimensions (unit: mm)



### Absolute Maximum Ratings

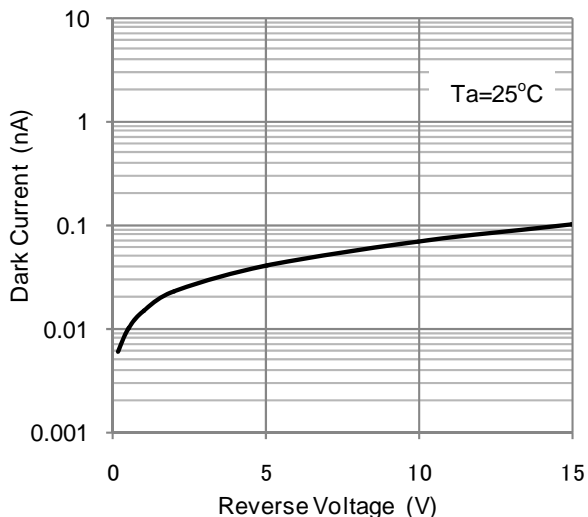
Parameter	Symbol	Value	Unit	Note
Reverse voltage	$V_R$	10	V	
Reverse current	$I_R$	500	$\mu A$	
Forward current	$I_F$	10	mA	
Operating temperature	$T_{opr}$	-40 to +125	$^{\circ}C$	Avoid dew condensation
Storage temperature	$T_{stg}$	-55 to +150	$^{\circ}C$	Avoid dew condensation

### Electrical and Optical Characteristics (Ta=25 °C unless otherwise noted)

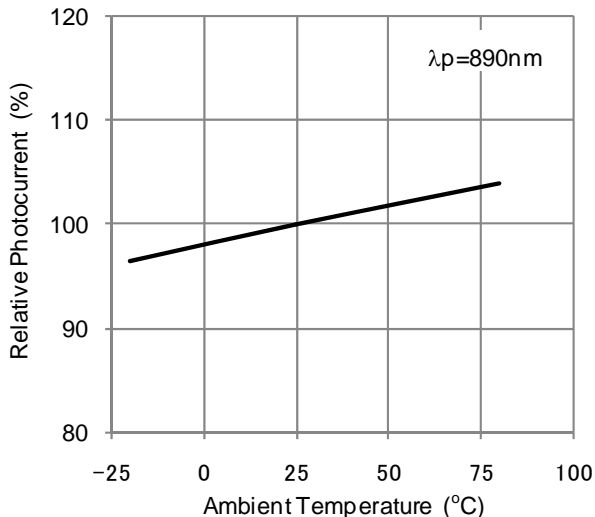
Parameter	Symbol	Min.	Typ.	Max	Unit	Test Conditions
Active area	S	1.5 x 1.8			mm	
Operating voltage	$V_{opr}$	-	-	5	V	
Sensitive wavelength	$\lambda$	400	840( $\lambda_p$ )	1000	nm	$\lambda_p$ =Peak wavelength
Open circuit voltage	$V_{op}$	-	450	-	mV	1000lx @2856K
Short circuit current	$I_{sh}$	-	70	-	$\mu A$	1000lx @2856K
Dark current	$I_D$	-	-	1	nA	$V_R=5V$
Terminal capacitance	$C_t$	-	250	-	pF	$V_R=0V, f=1MHz$

Specifications are subject to change without notice.

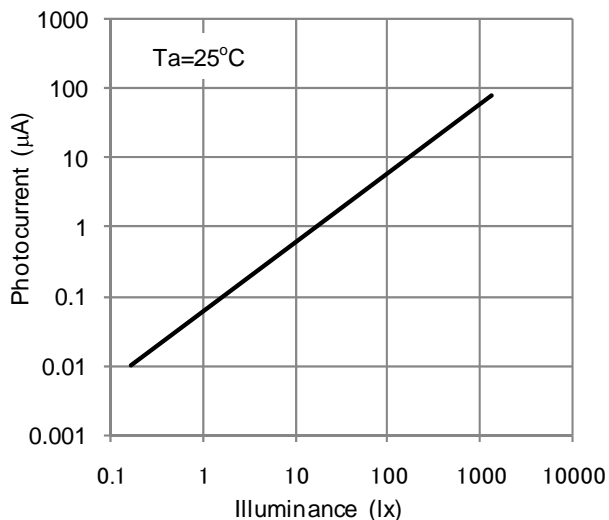
**Dark Current - Reverse Voltage**



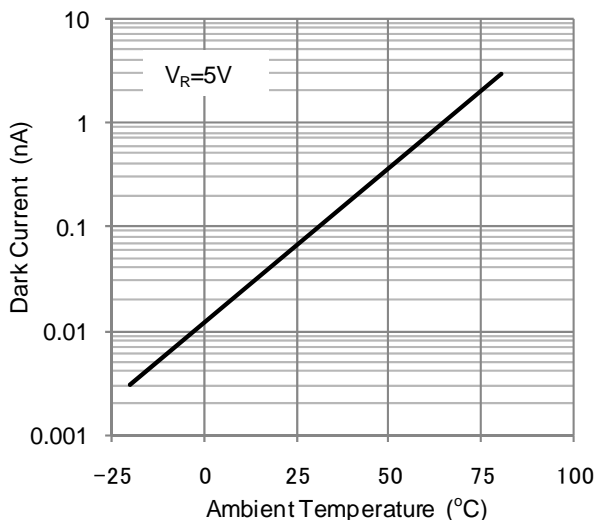
**Photocurrent - Ambient Temperature**



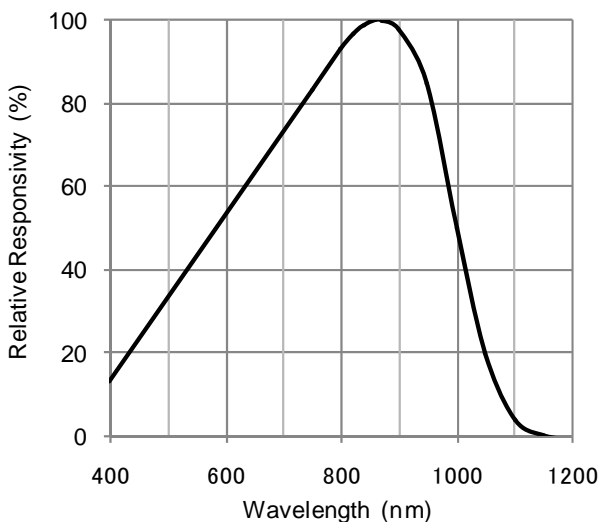
**Photocurrent - Illuminance**



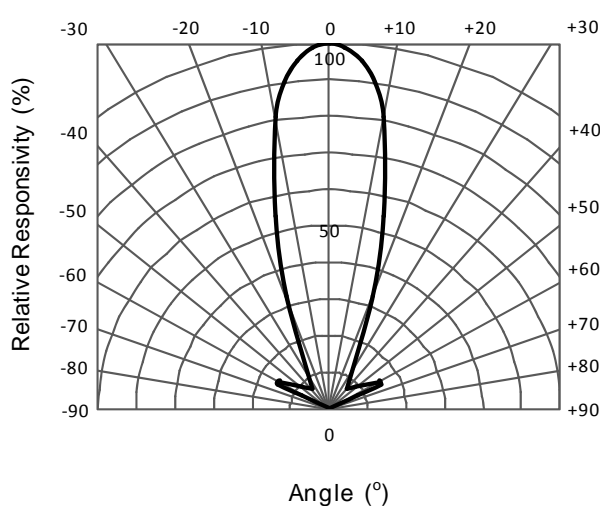
**Dark Current - Ambient Temperature**



**Spectral Responsivity**



**Directivity**



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**Contacts:**

[www.kyosemi.co.jp](http://www.kyosemi.co.jp) / [info@kyosemi.co.jp](mailto:info@kyosemi.co.jp)

Kansai Sales Office: 949-2 Ebisu-cho, Fushimi-ku, Kyoto, 612-8201 Japan Tel: +81 75 605 7311 Fax: +81 75 605 7312 (Overseas Sales Dept.)

Tokyo Sales Office: 24th Sky Building, 2nd Floor, 1-34-3 Shinjuku, Shinjuku-ku, Tokyo 160-0022 Japan Tel: +81 3 5312 5360 Fax: +81 3 5312 5367

Eniwa Operation: 385-31 Toiso, Eniwa-shi, Hokkaido 061-1405 Japan Tel: +81 123 34 3111 Fax: +81 123 34 2110

Kyosemi Opto America Corp: 3003 Bunker Hill Lane, Suite 102, Santa Clara, CA 95054 USA Tel: +1 408 492 1486 Fax: +1 408 492 9843